```
#include <iostream>
#include <limits.h>
#include <queue>
#include <string.h>
using namespace std;
#define v 6
int count=0;
bool bfs(int rg1[v][v],int s,int t,int p1[])
  bool visited[v];
  int j;
  queue<int> q;
  q.push(s);
  visited[s] = true;
  p1[s] = -1;
  while(!q.empty())
     int i = q.front();
     q.pop();
     for(j = 0;j < v;j++)
     if(visited[j] == false \&\& rg1[i][j] > 0)
        if(j == t)
        {
           p1[j] = i;
           return true;
        }
        q.push(j);
        p1[j] = i;
        visited[j] = true;
     }
  }
return false;
int fordfulkerson(int graph[v][v],int s,int t)
  int i,j,rgraph[v][v],parent[v],maxflow = 0;
  for(int i=0;i< v;i++)
     for(j=0;j< v;j++)
```

```
rgraph[i][j]=graph[i][j];
     }
  }
  int max_flow=0;
  while(bfs(rgraph,s,t,parent)==true)
  {
     count++;
    int path_flow = INT_MAX;
    for(j=t;j!=s;j=parent[j])
       i = parent[j];
       path_flow = min(path_flow,rgraph[i][j]);
    for(j=t;j!=s;j=parent[j])
       i = parent[j];
       rgraph[i][j] -=path_flow;
       rgraph[j][i] += path_flow;
    }
    max_flow+=path_flow;
  }
  return max_flow;
}
int main()
  int graph[6][6] =
     \{0,16,13,0,0,0\},
     \{0,0,10,12,0,0\},\
     \{0,4,0,0,14,0\},\
     \{0,0,9,0,0,20\},\
     \{0,0,0,7,0,4\},
     \{0,0,0,0,0,0\}
  };
  cout<<"Maximum Flow Possible is "<<fordfulkerson(graph,0,5);</pre>
  return 0;
}
```

## Output

/tmp/3qHSqGQgjP.o

Maximum Flow Possible is 12